

Federal Aviation Administration

Airworthiness Concern Sheet

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Reply to:

Name: Bryan Long

Title: ASE – Aerospace Engineer

Office: Atlanta ACO Department: FAA

Street Address: 1701 Columbia Ave City, State, ZIP: Atlanta, GA, 30337

Telephone: (404) 474-5578 Email: Bryan.Long@faa.gov Make: The New Piper Aircraft, Inc.

Models / Serial Numbers Affected:

PA- 23 - 250/250(6) Aztec

S/N affected: 27 - 4794 through 27- 8154030

PA-28-161 Cadet

S/N affected: 2841001 through 2841365

PA-28R-201 Arrow & Arrow Ill

S/N affected: 2837001 through 2837061 & 2844001

PA-28R-201T Turbo Arrow III

S/N affected: 2803001 through 2803015

PA-31, 300, 325 Navajo & Navajo CR S/N affected: 31-793 through 8312019

PA-31-350 Chieftain

S/N affected: 31-7305005 through 7405497 and

31-7552001 through 8452021

PA-31-350 T1020

S/N affected: 31-8253001 through 8553002

PA-31P Pressurized Navajo

S/N affected: 31P-3 through 31P-80 & 31P-7300110 through

7730012

PA-38-112 Tomahawk

S/N affected: 38-78A0801 through 82A0124

Reason for Airworthiness Concern: The FAA was made aware of model PA28-161 Cadet in the Netherlands had a "Low Volt" light illuminated and quite a lot of white smoke appeared from below the left hand side of the instrument panel, while in flight. This resulted in the crew of the aircraft declaring an emergency, performing the Electrical Fire emergency checklist actions, followed by the Forced Landing emergency checklist actions, and then landed with no injuries. The pilot in command shut the engine down, and the occupants evacuated the aircraft. The investigation found that a fuse in the circuit would have prevented the event. The investigation also revealed that Piper Aircraft Company issued a Service Bulletin SB 991A, dated 1/10/1996, addressing possible smoke formation from a failed alternator out switch. The service Bulletin provided instructions for the installation of a fuse on the alternator aux terminal.

The subject aircraft did not comply with Service Bulletin 991A. The FAA is concerned that other aircraft included within the effectivity of SB991A may not have accomplished the modification. The FAA would like to gather data to determine if this issue requires additional consideration in light of the reported incident/accident. The FAA FAASTeam provides a Fact Sheet for Service Bulletin compliance by following this link: https://www.faa.gov/news/safety_briefing/fact_sheets/media/SE_Topic_ServiceBulletins_AircraftOwner.pdf

Federal Aviation Administration (FAA) Description of Airworthiness Concern

Request for Information

The FAA is requesting the following information from owners and operators of the listed models and serial numbers of Piper Aircraft listed in the effectivity of this Airworthiness Concern Sheet (ACS).

1) Have you accomplished the modification prescribed in Piper Service Bulletin 991A, to alter the fuse protecting the solid state alternator out light switch on your aircraft? This may be determined by reviewing the aircraft logbook or inspecting the aircraft installation.

If the answer to question 1) was 'Yes':

a. Please provide feedback to the FAA that Piper SB 991A has been accomplished on your aircraft.

If the answer to question 1) was 'No' or "Unknown":

- b. Does the aircraft have an alternate method to ensure that if the alternator out light solid state switch fails, there is still a safety barrier in the aircraft or if cannot be determined please simply respond with "No" or "Unknown"? If there is an alternate method please provide detail of the installation.
- 2) Please reply to the FAA contact listed in the ACS with your answer to the inquiry and provide the aircraft model and serial number of your airplane.

This Airworthiness Concern Sheet (ACS) is intended as a means for FAA Aviation Safety Engineers to coordinate airworthiness concerns with aircraft owners/operators through associations and type clubs. At this time, the FAA has not made a determination on what type of corrective action (if any) should be taken. The resolution of this airworthiness concern could involve Airworthiness Directive (AD) action or a Special Airworthiness Information Bulletin (SAIB), or the FAA could determine that no action is needed at this time. The FAA's final determination will depend in part on the information received in response to this ACS.

The FAA endorses dissemination of this technical information to all manufacturers and requests association and type club comments.

Attachments:	Transmittal:	Response Requested
Service Difficulty Report		By:
Accident/Incident Data System	X Federal Aviation Administration	Emergency
\overline{X} Service Letter / Bulletin	(FSDO)	(10 days)
Special Airworthiness Information	X Airplane Owners and Pilots	X Alert
Bulletin	Association	(30 days)
Federal Aviation Administration or	X Experimental Aircraft Association	Information
National Transportation Safety	X Type Club	(90 days)
Board Safety Recommendation	Type Certificate Holder	
Airworthiness Directive	Other:	
Alternate Means of Compliance		
Risk Analysis		
Other:		